Washington State Building Code Council • Code Change Cycle 2010

Log #	Proponent	Code Section(s)	Title or Subject	TAG Review			Comments
				Meet Criteria?	Economic Impact	Recom-mendation	
2009 International Building Code							
IBC-1/ 10-12	Tom Phillips	IBC 504.2	5 story wood frame buildings	3B	-3FC	AM	Needs further review
IBC-2/ 10-11	Ed Golden	IBC 1511	Requirement for roof anchors			D	TAG Report included
	TAG Request	IBC 1005	Egress Width			2012 amendment	TAG requests emergency rule
2009 International Residential Code							
IRC-1/ 10-15	Annie O'Rourke	IRC R302.5 IRC R302.6 IRC R309	Reorganization of requirements for carports and garages			D	Tabled
IRC-2/ 10-17	Annie O'Rourke	IRC Table R403.1	Changes footing width to based on floors rather than stories	3	-1	AS	Implement in 2011
IRC-3/ 10-13	Annie O'Rourke	IRC Fig R403.4 IRC Table R404.1	Editorial correction	5	0	AS	Expedite Corrects errors
IRC-4/ 10-19	Annie O'Rourke	IRC 404.1.2.2	Removes requirement for lateral support at bottom of foundation walls	4	-1	AM	Implement in 2011
IRC-5/ 10-18	Annie O'Rourke	IRC R404.4	Allows 48" of fill for retaining walls	5	-1	AM	Implement in 2011
IRC-6/ 10-14	Annie O'Rourke	IRC R408.2	Renumbering of section				Hold to 2012
IRC-7/ 10-20	Annie O'Rourke	IRC Ch 4	Reorganization of Chapter 4				Tabled
IRC-8/ 10-11	Ed Golden	IRC R908	Requirement for roof anchors			(D – see IBC-2)	
IRC-9/ 10-22	Patrick Hayes	IRC Chapter 11	Adopts Ch 11 with amendments			Tabled per proponent request	

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2009 International Mechanical Code							
IMC-1/ 10-09	Lee Kranz	IMC 202, 501.2.1	Termination of environmental air ducts	3B	-1FC	AM	
2009 International Fire Code							
IFC-1/ 10-23	Dave Kokot	IFC 903.2.7	Clarification of sprinklers in Group M	5D	-	AM	TAG requests emergency rule
	TAG	IFC 4603.4.3 IFC 903.6.3 IBC 903.2.1.6	Nightclubs				TAG requests 2010 revision
2009 Uniform Plumbing Code							
IRC-10/ IMC-2/ UPC-1/ 10-01	Jeff Jordan	UPC 508.14; IRC G2408; IFGC 305.3; IMC 04.3	Elevation of water heaters			D	TAG recommends change to UPC to be consistent
UPC-2/ 10-02	Jeff Jordan	UPC 508.2	Strapping of water heaters			D	
UPC-3/ 10-10	Bryan Hampson	UPC 603.4.23	Air gaps for ice makers			D	
UPC-4/ 10-03	Jeff Jordan	UPC 608.7	Elevation of water heaters			D	
2009 WSEC							
WSEC1 10-21	Patrick Hayes	Replaces WSEC with IECC	Replaces WSEC with IECC as amended			Tabled per proponent's request	

TAG Review Report Guide

Policies Criteria

WAC 51-04-020 Policies for the consideration of proposed state-wide amendments

(1) The amendment is needed to address a critical life/safety need.
(2) The amendment is needed to address a specific state policy or statute.
(3) The amendment is needed for consistency with state or federal regulations.
(4) The amendment is needed to address a unique character of the state.
(5) The amendment corrects errors and omissions.

Objectives Criteria

RCW 19.27.020 Purposes--Objectives--Standards.

(A) To require minimum performance standards and requirements for construction and construction materials, consistent with accepted standards of engineering, fire and life safety.
(B) To require standards and requirements in terms of performance and nationally accepted standards.
(C) To permit the use of modern technical methods, devices and improvements.
(D) To eliminate restrictive, obsolete, conflicting, duplicating and unnecessary regulations and requirements which could unnecessarily increase construction costs or retard the use of new materials and methods of installation or provide unwarranted preferential treatment to types or classes of materials or products or methods of construction.
(E) To provide for standards and specifications for making buildings and facilities accessible to and usable by physically disabled persons.
(F) To consolidate within each authorized enforcement jurisdiction, the administration and enforcement of building codes.

Economic Impact

+	Increases cost
–	Decreases cost
SBI	Small Business Impact

FC	First Cost
OC	Ongoing Cost
EC	Enforcement Cost

Recommendation

AS	Approval as Submitted
D	Disapproval
AM	Approval with Modifications (see attached)
AO	Approval with Options (see attached)

IBC 1 / 10-12 : Five story wood framed buildings:

Recommend Approval with Modifications (pending further discussion):

504.2 Automatic sprinkler system increase.

Exception 4. Group R occupancies in buildings of Type VA construction may be a maximum of five stories, provided stairway enclosures are pressurized in accordance with Section 909.

IBC 2 IRC 8 / 10-11: Roof Access Safety Mechanism.

TAG Report:

The state amendment proposals IBC2/IRC8 would require a "roof access safety mechanism" on all buildings with an inclined roof. The Building, Fire Plumbing Codes Committee, recommended emergency approval of the requirement, and sent the proposal to the Building Code TAG for technical review. The TAG recommended disapproval of the proposal. Listed below are the concerns of technical group members related to the proposal.

Rationale

The TAG wanted more specific rationale for the requirement. The supporting documentation submitted and the proponent's statement at the TAG indicated costs of $10 million annually in injury claims from falls from roofs, and unknown numbers for homeowners.

The TAG was concerned about the how the proposal would address the problem. The rules under the Department of Labor and Industries are mandatory to protect all construction workers. The L&I rules cover the entire system and the employer is required to develop a fall protection work plan. If the rules are not being followed, how will a building code requirement help? If the intent is to protect homeowners on the roof of their single family homes, the TAG was concerned about who would provide the restraint gear and training over the life of the building.

Enforcement

The TAG was concerned about enforcement of the provisions. A building inspector would have to climb on the roof to inspect the connections on a roof anchor, creating another safety hazard. If it the intent of this code requirement is to include restraint gear, railings, safety nets, how would that be enforced?

Code Language

The TAG felt the proposal needed more research. The proposal needs to provide a definition of "roof access safety mechanism" and should specify what an "inclined roof surface" is. The TAG was concerned that many buildings have a designed system for roof work. Requiring anchors at specific points may be unnecessary where the building has a system design for anchorage, access and scaffolding.

IBC 1005 / IFC 1005 Egress Width

As approved at the Final Action Hearing in Dallas, IBC section 1005 Egress Width will be modified in the 2012 IBC/IFC to allow the width factor to be equivalent to the 2006 IBC, with the added requirement of an emergency voice/alarm communication system. The TAG recommends immediate adoption of the revised language, as the egress width provision in the 2009 IBC is excessive and would result in an isolated period when new buildings are required to provide wider paths of egress. The justification for immediate adoption through emergency rules is the 2009 IBC provision has a major economic impact, and causes enforcement problems.

SECTION 1005
MEANS OF EGRESS SIZING ~~WIDTH~~

1005.1 (IFC [B] 1005.1) General. All portions of the means of egress system shall be sized in accordance with this section.

Exceptions:

1. Means of egress complying with Section 1028.
2. For other than H and I-2 occupancies, the total width of means of egress in inches (mm) shall not be less than the total occupant load served by the means of egress multiplied by 0.2 inches (5.1 mm) per occupant for stairways and by 0.15 inches (3.8 mm) per occupant for other egress components in buildings that are provided with sprinkler protection in accordance with 903.3.1.1 or 903.3.1.2 and an emergency voice/alarm communication system in accordance with 907.5.2.2.

1005.2 (IFC [B] 1005.2) Minimum width based on component. The minimum width, in inches, of any means of egress component~~s~~ shall not be less than that specified for such component, elsewhere in this code.

1005.3 (IFC [B] 1005.3) Required capacity based on occupant load. The required capacity, in inches, of the means of egress for any ~~floor,~~ room, area, space or story shall ~~be sized to accommodate the total occupant load, as~~ not be less than that determined ~~by Section 1004,~~ in accordance with the following:

1005.3.1 (IFC [B] 1005.3.1) Stairways. The capacity, in inches, of means of egress stairways shall be calculated by multiplying the occupant load served by such stairway by a means of egress capacity ~~using a~~ factor of 0.3 inches (7.62 mm) ~~of width~~ per occupant ~~person~~.

1005.3.2 (IFC [B] 1005.3.2) Other egress components. The capacity, in inches, of means of egress components other than stairways shall be calculated by multiplying the occupant load served by such component by a means of egress capacity ~~using a~~ factor of 0.2 inches (5.08 mm) ~~of width~~ per occupant ~~person~~.

1005.4 (IFC [B] 1005.4) Continuity ~~Capacity based on egress path.~~ The capacity of the means of egress required from any story of a building shall not be reduced along the path of egress travel until arrival at the public way ~~be maintained to the termination of the means of egress.~~

1005.5 (IFC [B] 1005.5) Distribution of egress capacity. Where more than one exit, or access to more than one exit, is required, ~~multiple~~ the means of egress shall be configured ~~sized~~ such that the loss of any one exit, or access to one exit, ~~means of egress~~ shall not reduce the available capacity to less than 50 percent of the required capacity.

1005.6 (IFC [B] 1005.6) Egress convergence. Where the means of egress from stories ~~floors~~ above and below converge at an intermediate level, the capacity of the means of egress from the point of convergence shall not be less than the sum of the required capacities for the two adjacent stories ~~floors~~.

(Renumber subsequent sections)

1005.7 Door encroachment.

1005.8 Door hardware encroachment.

IRC 4 As Modified

R404.1.2.2 Reinforcement for foundation walls. Concrete foundation walls shall be laterally supported at the top except where permitted in R404.1.2.2.1 and R404.2.2.2, and at the bottom where required elsewhere in this code. (balance of section to remain unchanged)

IRC 5 As Modified

R404.4 Retaining Walls. Retaining walls not supporting a structure that are not laterally supported at the top and that retain in excess of 24 inches (610 mm) of unbalanced fill shall be designed to ensure stability against overturning, sliding excessive foundation pressure and water uplift. Retaining walls shall be designed for a safety factor of 1.5 against lateral sliding and overturning.

IMC-1/ 10-09:
Recommend Approval with Modifications:
(black underlined text shows proponents proposal; bold underlined text shows TAG modification)

ENVIRONMENTAL AIR. Air that is conveyed to or from occupied areas through ducts which are not part of the heating or air-conditioning system, such as ventilation for human usage, domestic kitchen range exhaust, ~~and~~ domestic clothes dryer exhaust**, transformer vault exhaust** and parking garage exhaust.

Also, modify Section 501 as follows for consistency:
(underlined text shows existing state amendment; bold underline and struck through language in Item 3 shows TAG modification; struck through language in Item 5 is proponent's proposal)

501.2.1 Location of Exhaust Outlet. The termination point of exhaust outlets and ducts discharging to the outdoors shall be located with the following minimum distances:

1. **For ducts conveying explosive or flammable vapors, fumes or dusts:** 30 feet (9144 mm) from the property line; 10 feet (3048 mm) from operable openings into the building; 6 feet (1829 mm) from exterior walls and roofs; 30 feet (9144 mm) from combustible walls and operable openings into the building which are in the direction of the exhaust discharge; 10 feet (3048 mm) above adjoining grade.
2. **For other product-conveying outlets:** 10 feet (3048 mm) from property lines; 3 feet (914 mm) from exterior walls and roofs; 10 feet (3048 mm) from operable openings into the building; 10 feet (3048 mm) above adjoining grade.
3. **For ~~all~~ all environmental air duct exhaust ~~other than enclosed parking garage and transformer vault exhaust~~:** 3 feet (914 mm) from property lines, 3 feet (914 mm) from operable openings into the building for all occupancies other that Group U, and 10 feet (3048 mm) from a mechanical air intake. Such exhaust shall not be considered hazardous or noxious.

   EXCEPTIONS: 1. The separation between an air intake and exhaust outlet on a single listed package HVAC unit.
   2. Exhaust from environmental air systems other than garages may be discharged into an open parking garage.
   3. Except for Group I occupancies, where ventilation system design circumstances require building HVAC air to be relieved, such as during economizer operation, such air may be relieved into an open or enclosed parking garage within the same building.
4. Exhaust outlets serving structures in flood hazard areas shall be installed at or above the design flood level.
5. ~~**For enclosed parking garage exhaust system outlets and transformer vault exhaust system outlets:** 10 feet (3048 mm) from property lines which separate one lot from another; 10 feet (3048 mm) from operable openings into buildings; 10 feet (3048 mm) above adjoining grade.~~
6. **For elevator machinery rooms in enclosed or open parking garages:** Exhaust outlets may discharge air directly into the parking garage.

6~~7~~. For specific systems see the following sections:
6~~7~~.1 Clothes dryer exhaust, Section 504.4.
6~~7~~.2 Kitchen hoods and other kitchen exhaust equipment, Sections 506.3, 506.4 and 506.5.
6~~7~~.3 Dust stock and refuse conveying systems, Section 511.
6~~7~~.4 Subslab soil exhaust systems, Section 512.4.
67.5 Smoke control systems, Section 513.10.3.
6~~7~~.6 Refrigerant discharge, Section 1105.7.
6~~7~~.7 Machinery room discharge, Section 1105.6.1.

IFC-1/ 10-23:

The TAG recommends immediate emergency adoption of this amendment to be consistent with the 2012 IFC/ IBC as approved at the Final Action Hearings in Dallas. This section needs a threshold for requiring sprinklers to be reasonable to enforce. As adopted under the 2009 IFC, the requirement would have disproportionate economic impact and create enforcement problems.

IFC [IBC] 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

4. A Group M occupancy that is used for the display and sale of mattresses and upholstered furniture exceeds 5000 square feet (464 m^2) .

IFC / IBC Nightclubs. The TAG recommends amending the sections in the IFC and IBC related to nightclubs as specified in RCW 19.27.500. The intent is to clarify application to both new and existing nightclubs including changes in use and occupancy.

IFC **4603.4.3 Nightclub.** An automatic sprinkler system shall be provided throughout Group A-2 nightclubs as defined in this code. ~~An existing nightclub constructed prior to July 1, 2006, shall have been provided with automatic sprinklers not later than December 1, 2009.~~ No building shall be constructed for, used for, or converted to, occupancy as a nightclub except in accordance with this section.

IFC ~~**903.6.3**~~ **903.2.1.6 Nightclub.** An automatic sprinkler system shall be provided throughout Group A-2 nightclubs as defined in this code. ~~Existing nightclubs constructed prior to July 1, 2006, shall be provided with automatic sprinklers not later than December 1, 2009.~~

IBC 903.2.1.6 Nightclub. An automatic sprinkler system shall be provided throughout Group A-2 nightclubs as defined in this code. ~~An existing nightclub constructed prior to July 1, 2006, shall be provided with automatic sprinklers not later than December 1, 2009.~~

UPC TAG recommends the following modification to Section 508.14 for consistency with the International Codes and the National Electric Code:

508.14 Installation in Residential Garages.

(1) ~~Gas utilization~~ Appliances in residential garages and in adjacent spaces that open to the garage and are not part of the living space of a swelling unit shall be installed so that burners, ~~and~~ burner-ignition devices and ignition sources are located not less than 18 inches above the floor unless listed as flammable vapor ignition resistant.

(Remainder of section remains unchanged)